

Draft
Decisions of Brazos BBASC
Through July 31, 2012
(consensus unless noted otherwise)

April 24

Selection of two projects to analyze for impact on BBEST EFR on yield

The BBASC selected Double Mountain Fork reservoir and Allens Creek reservoir (analyzed as a hypothetical project). The reasons for selecting Double Mountain Fork include: upper basin location; yield with EFR can be assessed; and BBEST has already completed some of the analysis of the project. The reasons for selecting Allens Creek include: lower basin location and BRA has data on Allens Creek that would facilitate the analysis. The Allens Creek reservoir has been permitted, but has not been built. It will be analyzed as a hypothetical project being permitted as of 2012. Initial analysis will focus on the impact of the BBEST EFR on yield compared to the impact of the Lyons method on yield.

Selection of a group to conduct the analysis

The following people volunteered to serve on a Work Group to conduct and present the analysis: From the BBASC – Dale Spurgin and Mark Phillips; from BRA, Brad Brunett; from the BBEST, Tom Gooch, David Dunn, and Phil Price (also from BRA); from Texas Parks and Wildlife Department, Cindy Loeffler and Yi Shen; from the Texas Water Development Board, Mark Wenzel and Yujuin Yang.

May 30-31

Goal

The BBASC adopted the following as its goal:

Create a set of environmental flow recommendations on which future water rights permits are considered that balances all water needs within the basin and that are understandable and are reasonable to implement

Additional analysis and information needed

The BBASC agreed to seek the following additional analysis and information for use in developing environmental flow standard recommendations:

- Allens Creek and Double Mountain Fork
 - Develop additional analyses for Allens Creek and Double Mountain Fork projects using TCEQ rules proposed for the Colorado-Lavaca
 - Perform attainment frequency analysis for Allens Creek and Double Mountain Fork projects under all scenarios run (historical condition, WAM 3, Lyons, full BBEST, and Colorado rules)
 - Consider such analysis for two other gage reaches
- Information on USGS hydrological classification of gages that BBEST currently is reviewing

EFS: base and subsistence

The BBASC agreed to note the following concept in its report:

The base and subsistence numbers recommended by the BBEST were derived from gauged flow statistics. In some areas, these historical gauged flows include releases of water from upstream reservoir storage that would not have been present under natural, pre-reservoir conditions, and are not guaranteed to be there in the future.

Preliminary decisions on EFS for base and subsistence flow for the following gages.

The BBEST agreed to use the BBEST base and subsistence flows and the 50% implementation rule for the following gages:

1. Double Mountain Fork Brazos River near Aspermont

2. Salt Fork Brazos River near Aspermont.
3. Brazos River at Seymour
4. Clear Fork Brazos River at Nugent
5. Clear Fork Brazos River at Fort Griffin
6. Brazos River near South Bend
- 20 San Bernard River near Boling

Selection of a strategies subcommittee:

The BBASC agreed to form a subcommittee to work on strategies development consisting of the following BBASC :

Matt Phillips (chair), Tommy O'Brien, Gena Leathers, Brian Hays, Horace Grace

June 28

Subsistence and overbank flow, all gages:

BBASC agreed to adopt the following as recommendations to TCEQ relating to the subsistence flow element and overbank flow element of their EFS recommendations:

- Adopt all BBEST subsistence flows for all gages
- Eliminate all overbank flows for all gages, but acknowledge in the report: (1) their importance, including for connectivity to oxbows; (2) why the group is not recommending them, including that TCEQ has not approved overbank flows in EFS rules and because of liability issues; and (3) the need for more studies (work plan item) relating to specific physical connection for oxbows

Gages 4, 5, 6, base and pulse flows

For gage No. 4 (Clear Fork Brazos River at Nugent), No. 5 (Clear Fork Brazos at Ft. Griffin), and No. 6 (Brazos River at South Bend), use the Cedar Ridge template with its three levels of base flow and pulse flows. (*See complimentary document entitled BBASC Decision chart*)

Tentative agreement

For hydrologic trigger

- Use the Palmer Hydrologic Index imposed on either two zones (with Possum Kingdom Lake dam as boundary) or three zones (with Possum Kingdom Lake dam and Lake Whitney dam as the boundaries) to determine dry, average and wet conditions (final decision pending TCEQ and BBEST input)
- Use PHI at the date immediately preceding the first day of the season

July 17

The BBASC reviewed its decisions from the last meeting and confirmed as follows:

Base/subsistence implementation rule

- For gages 4 (Clear Fork Brazos near Nugent), 5 (Clear Fork Brazos near Fort Griffin) and 6 (Brazos River near South Bend): In adopting the BBEST base flows on June 28, the BBASC also intended to adopt the BBEST 50% implementation rule (associated with diversions between the dry base flow standard and subsistence flow)

Hydrologic trigger

- For all gages: For the hydrologic trigger to determine if the base and pulse flows must meet dry, average or wet standards, the BBASC determined to use the Palmer Hydrologic Drought Index (PHDI) and to divide the basin into three areas for such application: above Possum Kingdom Reservoir dam, below Possum Kingdom Reservoir dam but above Lake Whitney dam, and below the Lake Whitney dam.

Gages 1,2, 3 base flow

The BBASC affirmed its tentative agreement from May 27-28 for gages 1 (Double Mountain Fork near Aspermont), 2 (Salt Fork near Aspermont) and 3 (Brazos at Seymour) to adopt the BBEST recommendations for base flow, including the 50% implementation rule.

July 31

Base flow all gages: BBASC agreed by consensus to adopt the BBEST environmental flow regime (EFR) for base flows at all gages and to include the 50 percent implementation rule related to base dry and subsistence flows as described in the BBEST report.

Pulse flow, gages 9-20: For all gages starting at No. 9 (North Bosque River near Clifton) and moving downstream for the remainder of the Brazos Basin and San Bernard basin: Adopt pulse flows using a CR/B template pattern referred to as “2-3-1” that would include:

- for the wet condition, 2 frequencies of seasonal BBEST HFP 2;
- for the average condition, 3 frequencies of the seasonal BBEST HFP 1; and
- for the dry condition, 1 frequency of the seasonal BBEST HFP 1.